WHAT IS CLAIMED IS:

1. A high-strength, low-temperature-sintered ceramic composition having a structure comprising hexagonal $SrAl_2Si_2O_8$ and an Al_2O_3 crystal.

2. A high-strength, low-temperature-sintered ceramic composition comprising hexagonal $SrAl_2Si_2O_8$ in an Al_2O_3-SiO_2-SrO-based matrix, which contains Al_2O_3 crystal grains.

3. The high-strength, low-temperature-sintered ceramic composition according to claim 2, wherein said matrix is an amorphous phase, in which hexagonal $SrAl_2Si_2O_8$ are precipitated.

4. The high-strength, low-temperature-sintered ceramic composition according to claim 2, wherein said matrix is substantially composed of a $SrAl_2Si_2O_8$ crystal, at least part of which is hexagonal $SrAl_2Si_2O_8$.

5. The high-strength, low-temperature-sintered ceramic composition according to any one of claims 2-4, wherein said matrix contains monoclinic $SrAl_2Si_2O_8$.

6. A high-strength, low-temperature-sintered ceramic composition having a structure comprising a $SrAl_2Si_2O_8$ crystal and an Al_2O_3 crystal, said $SrAl_2Si_2O_8$ crystal being composed of hexagonal $SrAl_2Si_2O_8$ alone or hexagonal $SrAl_2Si_2O_8$ and monoclinic $SrAl_2Si_2O_8$, and a peak intensity ratio represented by $I_{101} / (I_{101} + I_{002}) \times 100$ being 5% or more in an X-ray diffraction measurement by a Cu-Kα line, wherein I_{101} represents a peak intensity of a (101) plane of the hexagonal $SrAl_2Si_2O_8$, and I_{002} represents a peak intensity of a (002) plane of the monoclinic $SrAl_2Si_2O_8$.

7. The high-strength, low-temperature-sintered ceramic composition according to claim 6, wherein said peak intensity ratio is 50% or more.

8. The high-strength, low-temperature-sintered ceramic composition according to claim 6 or 7, which has a structure comprising a matrix substantially composed of the $SrAl_2Si_2O_8$ crystal, which contains Al_2O_3 crystal

grains, said $SrAl_2Si_2O_8$ crystal being composed of hexagonal $SrAl_2Si_2O_8$ alone or hexagonal $SrAl_2Si_2O_8$ and monoclinic $SrAl_2Si_2O_8$, and a percentage of said hexagonal $SrAl_2Si_2O_8$ in said $SrAl_2Si_2O_8$ crystal being 60% or more, and said ceramic composition having a bending strength of 400 MPa or more.

9. The high-strength, low-temperature-sintered ceramic composition according to any one of claims 1-8, wherein said Al_2O_3 crystal grains have an average diameter of 1 μm or less.

10. The high-strength, low-temperature-sintered ceramic composition according to any one of claims 1-9, wherein it comprises (a) 100% by mass of main components comprising 10-60% by mass of Al (as Al_2O_3), 25-60% by mass of Si (as SiO_2) and 7.5-50% by mass of Sr (as SrO), (b) auxiliary components comprising at least one selected from the group consisting of 0.1-10% by mass of Bi (as Bi_2O_3), 0.1-5% by mass of Na (as Na_2O), 0.1-5% by mass of K (as K_2O) and 0.1-5% by mass of Co (as CoO), and at least one selected from the group consisting of 0.01-5% by mass of Cu (as CuO), 0.01-5% by mass of Mn (as MnO_2), 0.01-5% by mass of Ag and 0.01-2% by mass of Zr (as ZrO_2), and (c) inevitable impurities.

11. The high-strength, low-temperature-sintered ceramic composition according to any one of claims 1-9, wherein it comprises (a) 100% by mass of main components comprising 10-60% by mass of Al (as Al_2O_3), 25-60% by mass of Si (as SiO_2), 7.5-50% by mass of Sr (as SrO) and 20% or less by mass of Ti (as TiO_2), (b) auxiliary components comprising at least one selected from the group consisting of 0.1-10% by mass of Bi (as Bi_2O_3), 0.1-5% by mass of Na (as Na_2O), 0.1-5% by mass of K (as K_2O) and 0.1-5% by mass of Co (as CoO), and at least one selected from the group consisting of 0.01-5% by mass of Cu (as CuO), 0.01-5% by mass of Mn (as MnO_2), 0.01-5% by mass of Ag and 0.01-2% by mass of Zr (as ZrO_2), and (c) inevitable impurities.

12. The high-strength, low-temperature-sintered ceramic composition

according to any one of claims 1-9, wherein it comprises 10-60% by mass of Al (as Al_2O_3), 25-60% by mass of Si (as SiO_2), 7.5-50% by mass of Sr (as SrO), and inevitable impurities.

13. A method for producing the high-strength, low-temperature-sintered ceramic composition recited in any one of claims 1-12, by sintering a ceramic green body comprising aluminum oxide, silicon oxide and strontium oxide, or aluminum oxide, silicon oxide, strontium oxide and titanium oxide as main starting materials, under such temperature and time conditions that a ratio of hexagonal $SrAl_2Si_2O_8$ in a $SrAl_2Si_2O_8$ crystal formed in a ceramic structure becomes 5% or more.

14. A laminated electronic part comprising pluralities of dielectric layers made of the high-strength, low-temperature-sintered ceramic composition recited in any one of claims 1-12, each of said dielectric layers being provided with a conductive pattern of a low-melting-point metal.

15. The laminated electronic part according to claim 14, wherein said low-melting-point metal is silver, copper, gold or an alloy thereof.

16. The laminated electronic part according to claim 14 or 15, wherein said conductive pattern constitutes an inductance element and/or a capacitance element.

17. The laminated electronic part according to any one of claims 14-16, onto which at least one selected from the group consisting of an inductance element, a capacitance element, a switching element and a filter element is mounted.